

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/660,708	KURELEK ET AL.	
	Examiner Shelley Self	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 8/17/05.
2.  The allowed claim(s) is/are 11-30.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

  
 DENNIS H. BANKS  
 SUPERVISORY PATENT EXAMINER  
 TECHNOLOGY CENTER 3700

## **DETAILED ACTION**

### ***Response to Amendment***

The amendment filed on August 17, 2005 is sufficient to overcome the prior art reference.

### ***Drawings***

The replacement drawings were received on August 17, 2005. These drawings are approved.

### ***Allowable Subject Matter***

Claims 11-30 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art of record does not disclose or fairly suggest a knuckle boom apparatus comprising the following:

*-a means for producing reach, comprising pump means connected to control said transfer of hydraulic oil between said working ends in combination with the rest of the claimed limitations as set forth in claim 11*

*-two engine-drive computer-controlled reversible flow pumps connected to supply or remove oil in coordinated fashion from working ends of said cylinders, to capture mechanical energy by the engine from one said pump and use it in the other said pump in combination with the rest of the claimed limitations as set forth in claim 26*

*-means for producing reach, comprising pump means connected to control said transfer of hydraulic oil between said non-working ends in combination with the rest of the claimed limitations as set forth in claim 27.*

The prior art reference, Liu discloses a knuckle boom apparatus comprising a machine base (1), a hoist boom (6) having a proximal end and a distal end, a stick boom (7) having a proximal end and a distal end; a hoist cylinder (10) at least one hydraulic stick cylinder (11), means for producing reach comprising a cylinder (16) and a circuit (figs. 2, 4-6) for supplying hydraulic fluid to the cylinders. Liu does not disclose *means for producing reach comprising pump means for controlling said transfer of hydraulic oil between said working ends or non-working ends*. Instead Liu discloses hydraulic oil to shunt (i.e., travel/float) between the hoist and stick cylinders and reach being controlled by a reach cylinder (16). Liu discloses pumps (30, 32) and a means for supplying hydraulic oil/fluid to the cylinders. Liu's pump means (30, 32) *do not control the transfer of hydraulic oil between said working ends or non-working ends* as set forth in claim 11. Additionally, Liu does not disclose *two engine-drive computer-controlled reversible flow pumps connected to supply or remove oil, to capture mechanical energy by the engine from one said pump and use it in the other said pump* as set forth in claim 26. Accordingly, Liu fails to anticipate or render obvious the claimed invention as set forth in claims 11, 26 and 27.

Neither the prior art of record, nor any combination thereof discloses the claimed invention as set forth in claims 11, 26 and 27. Accordingly claims 11-30 are allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (571) 272-4524. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on accessing the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SSelf  
September 21, 2005



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